

REMARKS

Claims 1-14 stand rejected under 35 U.S.C. § 101 on grounds that the claimed invention is directed to nonstatutory subject matter. As will be shown below claims 1-7, as currently amended, include physical structure for implementing the method recited in claims 1-7 and claims 8-14, as originally submitted, include physical structure for implementing the system recited in claims 8-14. Applicants therefore respectfully request reconsideration of claims 1-14.

Claims 5-7, 12-14, and 19-21 stand rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. As will be shown below the “second domain metric vector/ vector action list / user metric space...” of claims 5-7, 12-14, and 19-21 need no extra antecedent basis. Applicants therefore respectfully request reconsideration of claims 15-7, 12-14, and 19-21.

Claims 1-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Trossen, *et al.* (U.S. Publication No. 2003/0204599) (hereafter ‘Trossen’). As will be shown below, Trossen, does not anticipate administering devices as claimed in the present application. Claims 1-21 are therefore patentable and should be allowed. Applicants respectfully traverse each rejection individually below and request reconsideration of claims 1-21.

Claim Rejections – 35 U.S.C. § 101

Claims 1-14 stand rejected under 35 U.S.C. § 101 on grounds that the claimed invention is directed to nonstatutory subject matter. The Office Action advises that claims 1-14 constitute software *per se* as no physical structure is present for implementing either the method or system. Applicants have accordingly amended the method of claim 1 to recite:

1. A method for administering devices, the method implemented with two data processing domains, a first domain and a second domain,

each domain comprising a networked data processing environment,
the domains coupled for data communications, the method
 comprising:

receiving, in the second domain from the first domain, a domain
state object, the domain state object comprising information
representing a state of the first domain;

identifying by the second domain an action in dependence upon the
 domain state object; and

the second domain's executing the action.

It is thus apparent that the method of claim 1 as currently amended is implemented by a physical structure, two data processing domains coupled for data communications, each domain comprising a networked data processing environment. Dependent claims 2-7 depend from claim 1 and include all limitations of claim 1 including the physical structure used to implement the method of claim 1. The method of claim 1 is patentable under 35 U.S.C. § 101 because it implemented with a physical structure. Claims 2-7 are also therefore patentable under 35 U.S.C. § 101 for the same reason. The original specification in this case is replete with enabling descriptions of data processing domains. Applicants therefore respectfully submit that the current amendment adds no new matter to the present application. Applicants respectfully request reconsideration of claims 1-7.

Claims 8-14 are directed to a system for administering devices according to embodiments of Applicants' present application. During patent examination, the pending claims must be given their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005), citing *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Applicants' original specification at page 7, lines 7-10, describes a "system" as "any computer system that includes suitable programming means for

operating in accordance with the disclosed methods...” A computer system that includes suitable programming means for operating in accordance with Applicants’ disclosed methods is a physical structure. The system of claims 8-14, when read in light of the specification, is therefore drawn to a computer system, a physical structure for implementing claims 8-14. Because claims 8-14 include a physical structure claims 8-14 are patentable under 35 U.S.C. § 101. Applicants respectfully request reconsideration of claims 8-14.

Claim Rejections – 35 U.S.C. § 112, Second Paragraph

Claims 5-7, 12-14, and 19-21 stand rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Office Action advises that the “second domain metric vector/ vector action list / user metric space...” of claims 5-7, 12-14, and 19-21 lacks antecedent basis. As explained below in more detail, the “second domain metric vector/ vector action list / user metric space...” of claims 5-7, 12-14, and 19-21 has sufficient antecedent basis. The rejections under 35 U.S.C. § 112, second paragraph, should therefore be withdrawn and claims 5-7, 12-14, and 19-21 should be allowed.

“A second domain metric vector” as recited in claims 5, 12, and 19 has sufficient antecedent basis to satisfy the requirements of 35 U.S.C. § 112, second paragraph. “A second domain metric vector” is a metric vector for a second domain, referred to for clarity as a second domain metric vector. A second domain metric vector is not *another* domain metric vector. Because the metric vector of claims 5, 12, and 19 is only referred to for clarity as a second domain metric vector and is not *another* domain metric vector, “a second domain metric vector” therefore in fact has sufficient antecedent basis, and the rejections under 35 U.S.C. § 112, second paragraph, should be withdrawn. Applicants respectfully request reconsideration of claims 5, 12, and 19.

“A second domain vector action list” as recited in claims 6, 13, and 20 has sufficient antecedent basis to satisfy the requirements of 35 U.S.C. § 112, second paragraph. “A

second domain vector action list” is a vector action list for a second domain, referred to for clarity as a second domain vector action list. A second domain vector action list is not *another* vector action list. Because the vector action list of claims 6, 13, and 20 is only referred to for clarity as a second domain vector action list and is not *another* domain vector action list, “a second domain vector action list” therefore in fact has sufficient antecedent basis, and the rejections under 35 U.S.C. § 112, second paragraph, should be withdrawn. Applicants respectfully request reconsideration of claims 6, 13, and 20.

“A second domain user metric space” as recited in claims 7, 14, and 21 has sufficient antecedent basis to satisfy the requirements of 35 U.S.C. § 112, second paragraph. “A second domain user metric space” is a user metric space for a second domain, referred to for clarity as a second domain user metric space. A second domain user metric space is not *another* user metric space. Because the user metric space of claims 7, 14, and 21 is only referred to for clarity as a second domain user metric space and is not *another* domain user metric space, “a second domain user metric space” therefore in fact has sufficient antecedent basis and the rejections under 35 U.S.C. § 112, second paragraph, should be withdrawn. Applicants respectfully request reconsideration of claims 7, 14, and 21.

Claim Rejections – 35 U.S.C. § 102 Over Trossen

Claims 1-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Trossen, *et al.* (U.S. Publication No. 2003/0204599) (hereafter ‘Trossen’). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As explained in more detail below, Trossen does not disclose each and every element of claim 1, and Trossen therefore cannot be said to anticipate the claims of the present application within the meaning of 35 U.S.C. § 102(e).

Independent claim 1, as currently amended, claims:

1. (Currently Amended) A method for administering devices, the method implemented with two data processing domains, a first domain and a second domain, each domain comprising a networked data processing environment, the domains coupled for data communications, the method comprising:

receiving, in the second domain from the first domain, a domain state object, the domain state object comprising information representing a state of the first domain;

identifying by the second domain an action in dependence upon the domain state object; and

the second domain's executing the action.

Trossen Does Not Disclose Receiving A Domain State Object, Identifying An Action In Dependence Upon The Domain State Object, Or Executing The Action

The Office Action takes the position that Trossen at paragraphs 0024-0027, discloses every element of claim 1 as claimed prior to the current amendment: receiving a domain state object, identifying an action in dependence upon the domain state object, and executing the action. Applicants assume in the following remarks that the Examiner would also take the position that Trossen anticipates claim 1 as currently amended. Applicants respectfully note in response, however, that what Trossen at paragraph 0024-0027, in fact discloses is:

[0024] Suppose now that the user desires to move MT 12 from the current WLAN administrative domain 15 to a new administrative domain 19 in communication with new access router 18 and new access network 20. Suppose also that the bandwidth in new administrative domain 19 is less than the WLAN administrative domain. This would typically be the case for example if the new administrative domain happens to be the outdoor cellular coverage. Because the session was established with higher bandwidth capabilities, the session may be unable to continue

uninterrupted in its current state as regards resolution, speed of video motion, size of displayed pictures, color combinations, clarity of audio etc. Some of these parameters need to be changed so that the video stream can fit in the new bandwidth constraints. To achieve this, prior to handoff from access router 14 to access router 18, MT 12 constructs an application context for the video session and registers 72 it with current access router 14. It may create the application context, for example, from information obtained in the SDP descriptive information in the SIP INVITE message from CS 22 and from MT 12's subsequent response. In order to register the application context, MT 12 formats the application context information into a pre-determined format that such access routers may accept. The pre-determined format may be according to a standard, such as one recommended by IETF. As an example, the standard format could be an object that could be used by an object-oriented application running on access routers 14, 18. Such object technologies, for example, may include Common Object Request Broker Architecture (CORBA), Distributed Component Object Model (DCOM), Simple Object Access Protocol (SOAP), Enterprise Java Beans (EJB), and Type Length Value (TLV).

[0025] After MT 12 creates and formats the application context for the video session, it registers 72 the context by transferring it to current access router 14, for example, via IP messaging. Such IP messaging may make use of protocols, for example, like Internet Control Message Protocol (ICMP), User Datagram Protocol (UDP), Transmission Control Protocol (TCP), and Stream Control Transmission Protocol (SCTP). According to one aspect of the invention, the transfer of application context to current access router 14 occurs along with a handoff trigger message from MT 12, such as an indication of a reduction in signal strength. According to other aspects, the application context may be transferred at the beginning of the session, at handoff, or almost any other time therebetween. As shown in FIG. 6, registration 72 may occur at the beginning of the session prior to CS 22 sending 74 data to MT 12. Further, the application context may be periodically updated, such as when changes occur to sessions. Although discussed in combination with a video call scenario, the application context may include information about various types of applications and sessions and about multiple concurrent sessions and applications for MT 12.

[0026] As diagrammed in FIG. 6, after MT 12 transmits the application context to current access router 14, current access router 14 receives the application context and transmits 76 the application context to new access router 18. The timing of the transfer between access routers 14 and 18 may vary. For example, if MT 12 registers the application context at the beginning of the session, access router 14 may simply store the application context in memory 56 until it anticipates a handoff. It may anticipate a handoff based on the reception of a handoff trigger from MT 12, or based

on other information, such as by GPS tracking information for MT 12. Conversely, if MT 12 registers the application context along with a handoff trigger, access router 18 may immediately transfer the associated application context for MT 12 and its current sessions to new access router 18. Transfer 76 of the application context for MT 12 and its sessions from router 14 to router 18 may occur via Internet communications using IP messaging.

[0027] Upon reception of the application context, new access router 18 evaluates the application context to determine whether steps are necessary to introduce application-specific functionality for the session. It may do this by comparing the parameters contained in the application context with corresponding capabilities for transmissions via access network 20 and communication capabilities for domain 19. For example, in the video call scenario, access router 18 may evaluate the application context and determine that the bandwidth for communicating with MT 12 in new administrative domain 19 is less than the established session, as originally supported by broadband WLAN administrative domain 15. As such, access router 18, in accordance with program instructions stored in memory 56, may establish a relationship with network entity 35 to provide necessary application-specific functionality for the session. In the case of the video call session, network entity 35 may be a transcoding proxy server 35 that transforms the high bandwidth video into low bandwidth video appropriate for transmission over the new wireless link.

That is, Trossen at paragraphs 0024-0027, discloses an application context that may be formatted as an object that could be used by an object oriented application, the application context created in order to move a mobile terminal (MT 12) from a current administrative domain to a new administrative domain. Trossen's application context that may be formatted as an object that could be used by an object oriented application, the application context created in order to move a mobile terminal (MT 12) from a current administrative domain to a new administrative domain, does not disclose receiving a domain state object, identifying an action in dependence upon the domain state object, or executing the action as claimed in the present application. A domain state object is described at Applicant's original specification page 45, lines 10-20 as:

The exemplary class diagram of Figure 3 includes a domain state object (914). The exemplary domain state object of Figure 3 includes a userID (405) identifying the user. The exemplary domain state object of Figure 3 includes a user's metric vector (606). In many examples, the metric vector

is the user's current metric vector when the domain state object was created. The exemplary domain state object of Figure 3 includes a metric space (610). In many examples, the metric space (610) of the domain state object is the user's current metric space when the domain state object was created. The domain state object of Figure 3 also includes a current device state object "CDSO" (926). The current device state object (926) is a data structure including at least one device and the current value of an attribute of that device in the domain when the domain state object was created.

Applicants further describe a domain state object at Applicants' original specification page 76, line 24 – page 77, line 5 as follows:

In many examples of the method of Figure 13, a domain state object (914) is a data structure including information describing the state of the first domain and information describing the current condition of the user in the first domain (912). In various alternative embodiments of the method of Figure 13, the specific information contained in a domain state object will vary. Typical domain state objects however include information identifying devices within the first domain and the state or current value of an attribute of those devices. Typical domain state objects also include information describing a user's current condition within the first domain such as the user's current metric vector and the user's current metric space.

As can be seen from these passages of Applicants' original specification, a domain state object is a data structure that includes information identifying devices, not a single device, within a first domain and a current device state object which is a data structure including at least one device, not only a single device, and the current value of an attribute of that device in the domain when the domain state object was created.

Trossen's application context is created, however, for only a single device, the mobile terminal (MT 12), and does not include information identifying more than a single device within a first domain or a current device state object that includes at least one device as described in Applicant's original specification. Trossen's application context that may be formatted as an object that could be used by an object oriented application, the application context created in order to move a mobile terminal (MT 12) from a current administrative domain to a new administrative domain does not disclose therefore a domain state object as claimed in the present application. Because Trossen does not

disclose a domain state object as claimed in the present application it cannot be said that Trossen discloses receiving a domain state object, identifying an action in dependence upon the domain state object, or executing the action as claimed in the present application. Because Trossen does not disclose each and every element and limitation of Applicants' claims, Trossen does not anticipate Applicants' claims, and the rejections under 35 U.S.C. § 102(e) should be withdrawn.

Relations Among Claims

Independent claims 8 and 15 are system and computer program product claims for administering devices corresponding to independent method claim 1 that include "means for" and "means, recorded on [a] recording medium, for" administering devices. For the same reason that Trossen does not disclose a method for administering devices, Trossen also does not disclose systems and computer program products for administering devices corresponding to independent claims 8 and 15. Independent claims 8 and 15 are therefore patentable and should be allowed.

Claims 2-7, 9-14, and 16-21 depend respectively from independent claims 1, 8, and 15. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because Trossen does not disclose each and every element of the independent claims, Trossen does not disclose each and every element of the dependent claims of the present application. As such, claims 2-7, 9-14, and 16-21 are also patentable and should be allowed.

Conclusion

Claims 1-21 stand rejected under 35 U.S.C. § 102 as being anticipated by Trossen. Trossen does not disclose each and every element of Applicants' claims. Trossen therefore does not anticipate Applicants' claims. Claims 1-21 are therefore patentable and should be allowed. Applicants respectfully request reconsideration of claims 1-21.

Claims 1-14 stand rejected under 35 U.S.C. § 101 on grounds that the claimed invention is directed to nonstatutory subject matter. Claims 1-7, as currently amended, include physical structure for implementing the method recited in claims 1-7 and claims 8-14, as originally submitted, include physical structure for implementing the system recited in claims 8-14. Applicants therefore respectfully request reconsideration of claims 1-14.

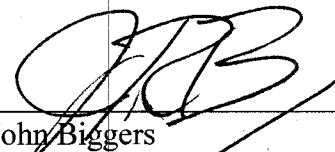
Claims 5-7, 12-14, and 19-21 stand rejected under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The “second domain metric vector/ vector action list / user metric space:...” of claims 5-7, 12-14, and 19-21 need no extra antecedent basis. Applicants therefore respectfully request reconsideration of claims 15-7, 12-14, and 19-21.

The Commissioner is hereby authorized to charge or credit Deposit Account No. 09-0447 for any fees required or overpaid.

Respectfully submitted,

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